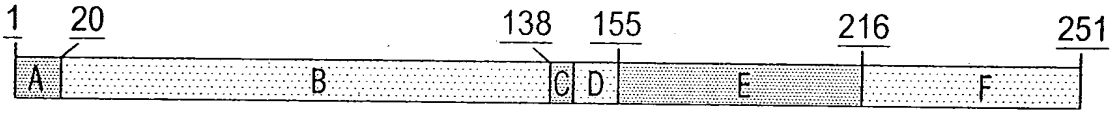


Fig. 1

FIG - 2B

FIG - 2A

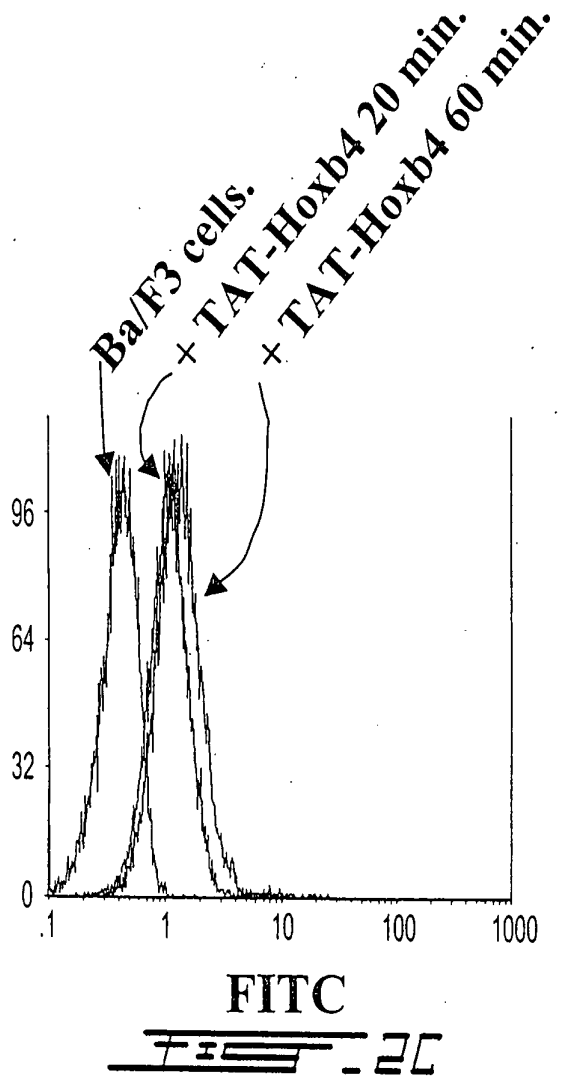


Fig 2C

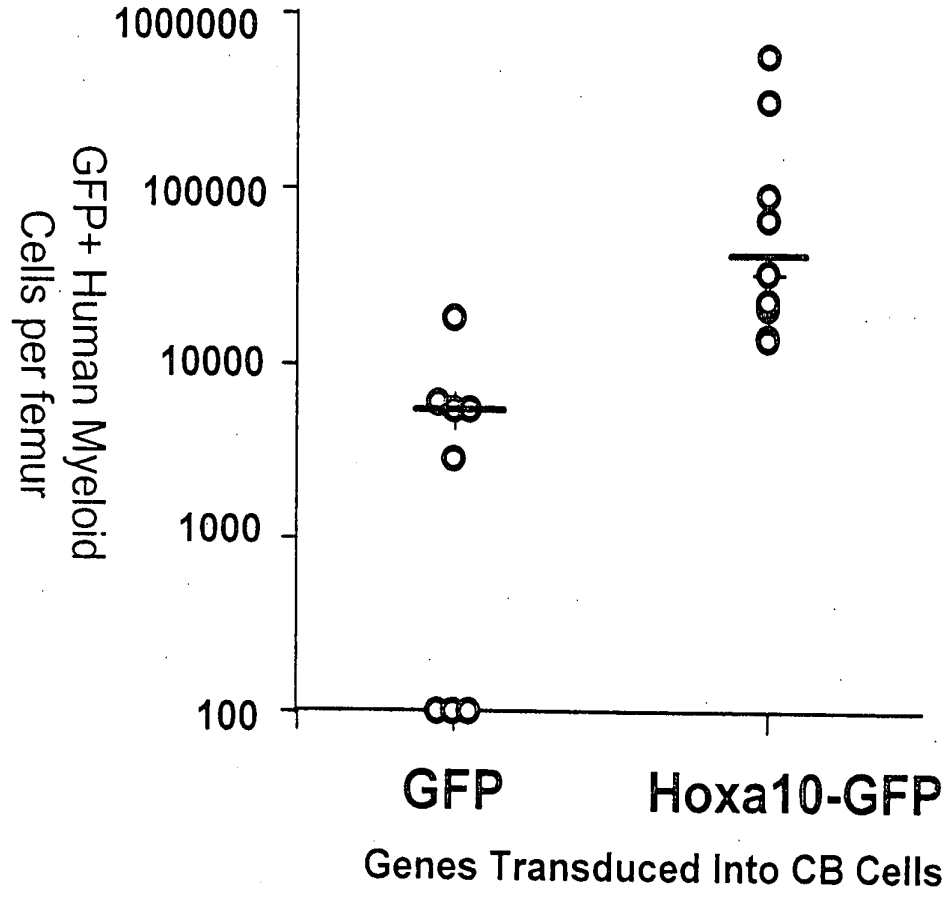


Fig 3

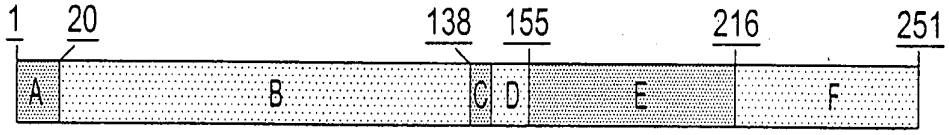
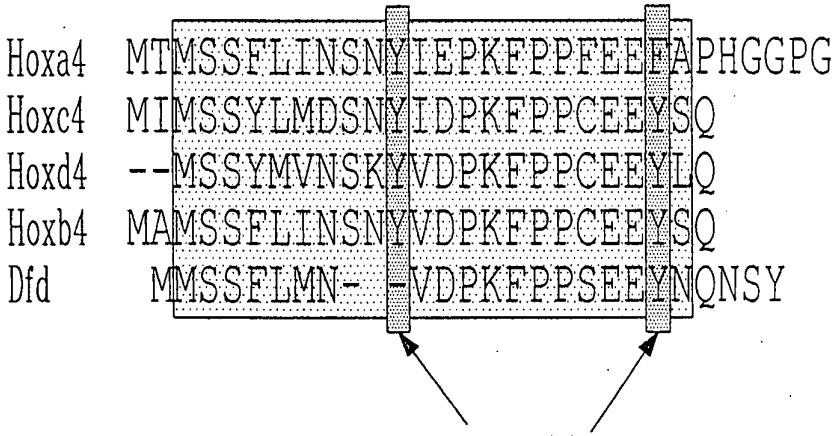


Fig. 4A

Mutant HOXB4 protein (letters refer to HOXB4 domains)	Proliferative effect on Rat-1 cells	Proliferative effect on d12-CFU-S (over controls)
A to F (wild-type)	++	↑200 X
C+D+E+F	++	No increase
A+B+C	No effect	No increase
A to F with point mutation in C (Trp>Gly)	No effect	No increase
A to F with point mutation in E (Asn>Ser)	No effect	No increase

Fig. 4B

Domain A: Protein sequence



Conserved Tyrosine (Y) flanked by acidic (D-E) amino-acids suggesting that it might be a substrate for tyrosine kinases

Domain B: Not conserved but contains :

-a long proline stretch (n=15)
-4 tyrosines
-a potential site for phosphorylation by cAMPprotein kinase
-a potential site for phosphorylation by casein kinase II
-a potential site for phosphorylation by PKC

FIG 5

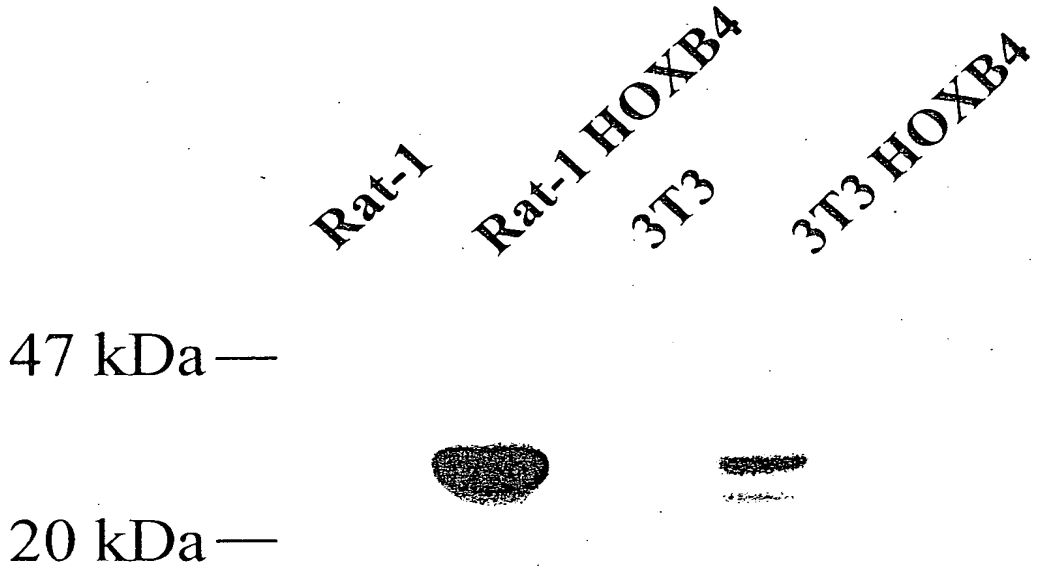


FIG. 6

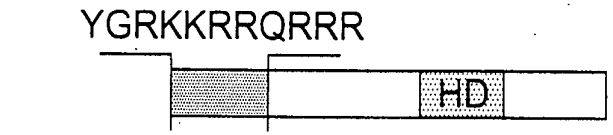


Fig 7a

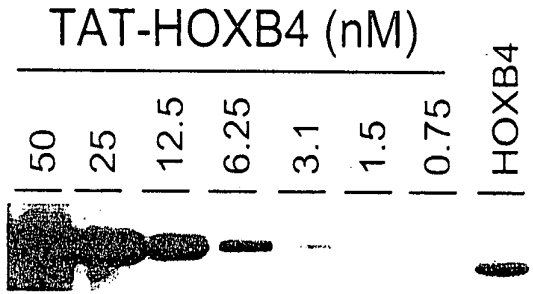


Fig 7c

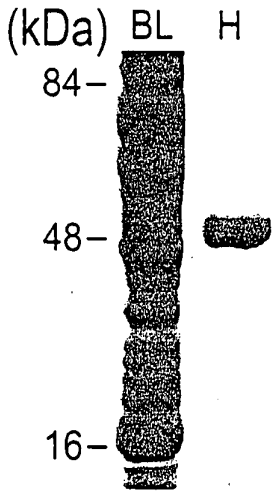


Fig 7b

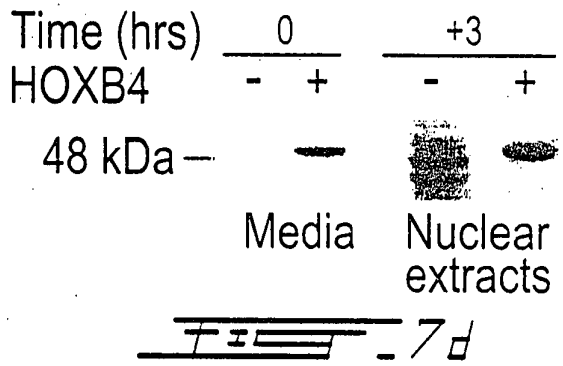


Fig 7d

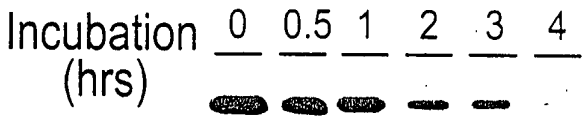


Fig 7e

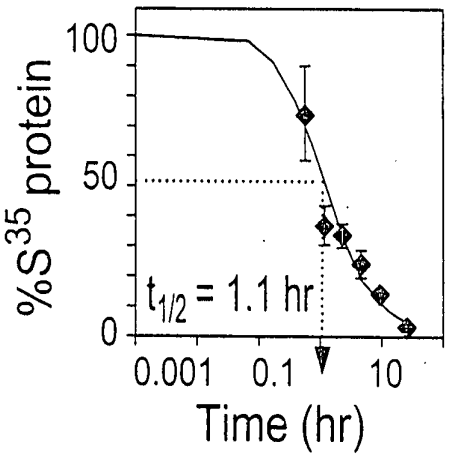


Fig 7f

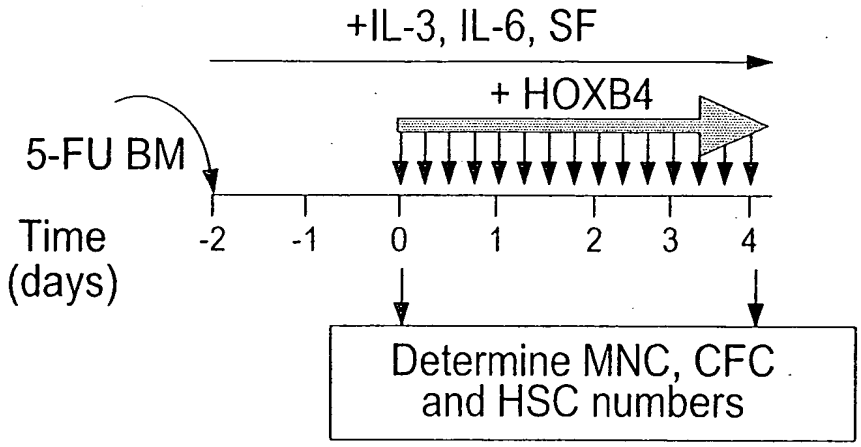


Fig 8a

Time (hrs)	0	+3	+6	+9	+12	+15	+18	+24
Fresh media + HOXB4	+	-	-	-	-	-	-	+
HOXB4 addition	-	+	+	+	+	+	+	-
FCS, cytokine adjustment	-	-	-	-	+	-	-	-

Fig 8b

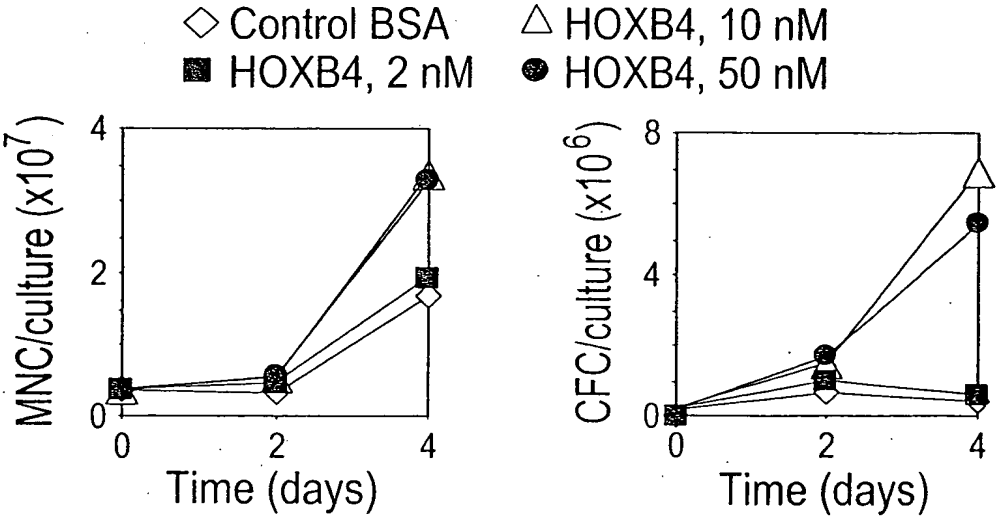


Fig 8c

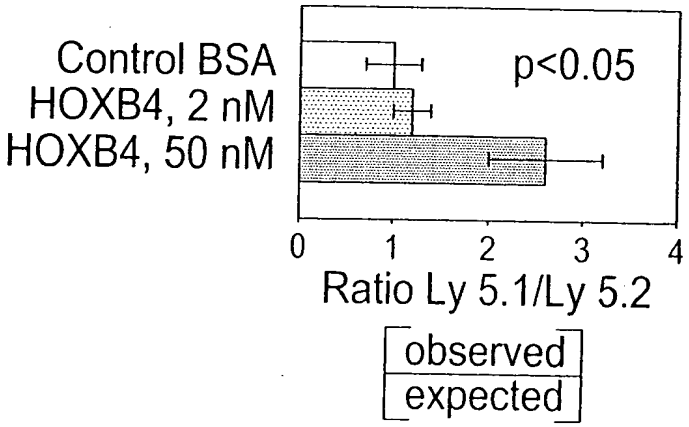


Fig 8d

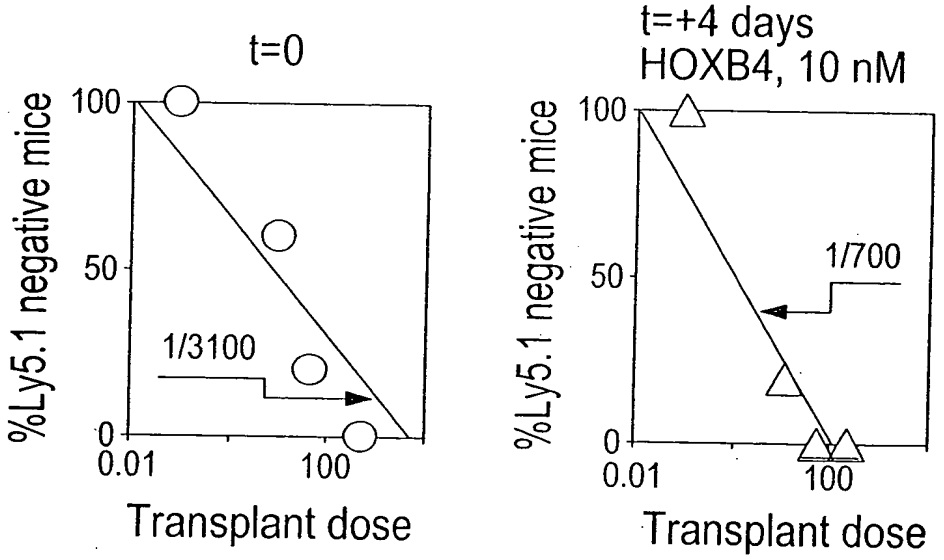


Fig 8e

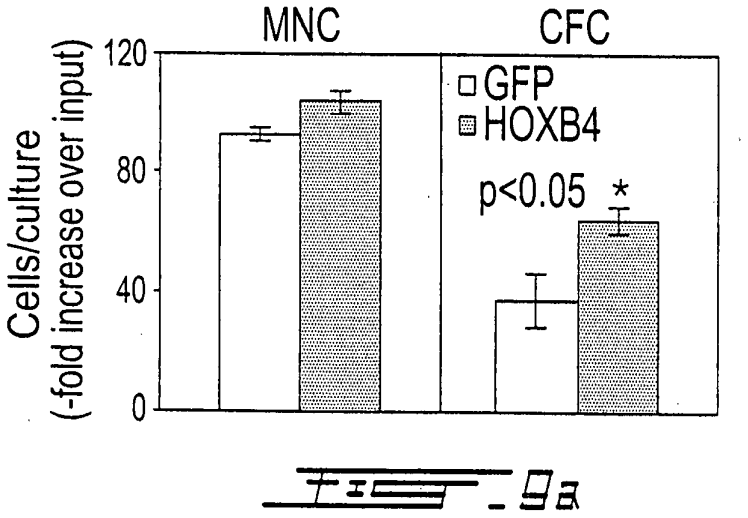


Fig 9a

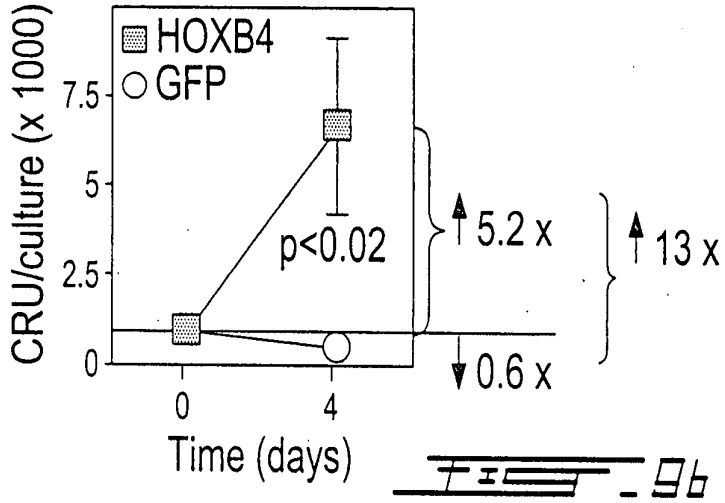


Fig 9b

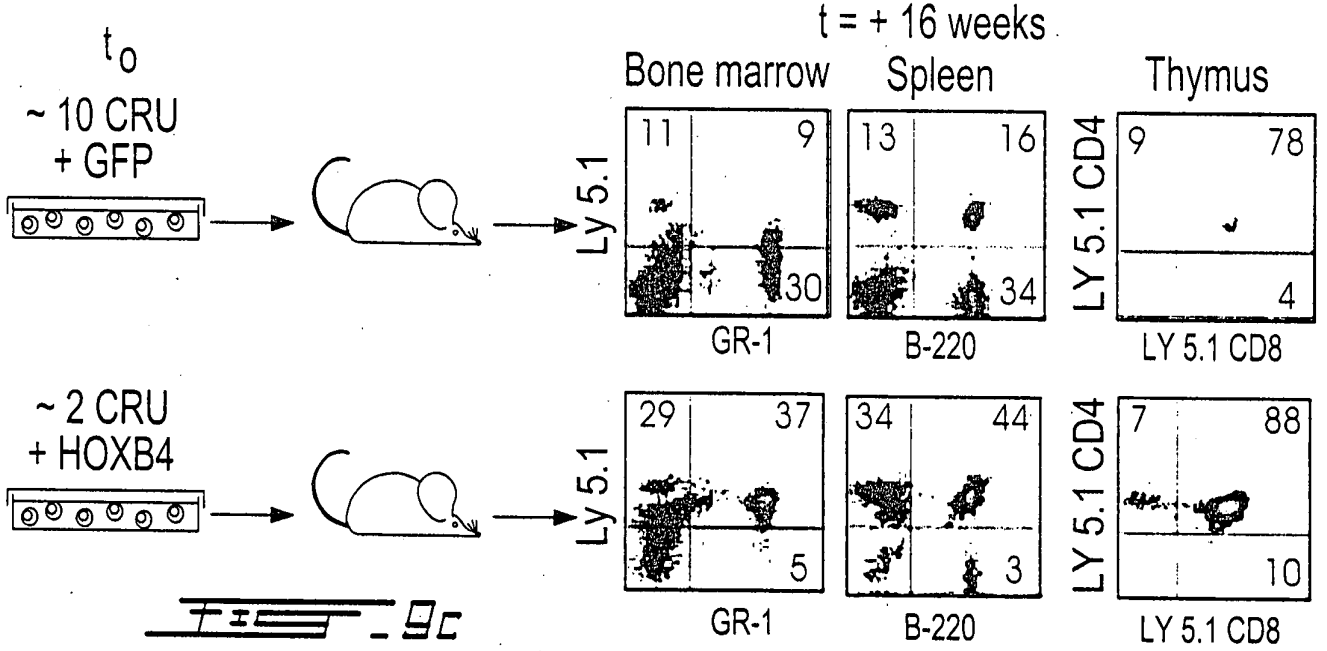


Fig 9c

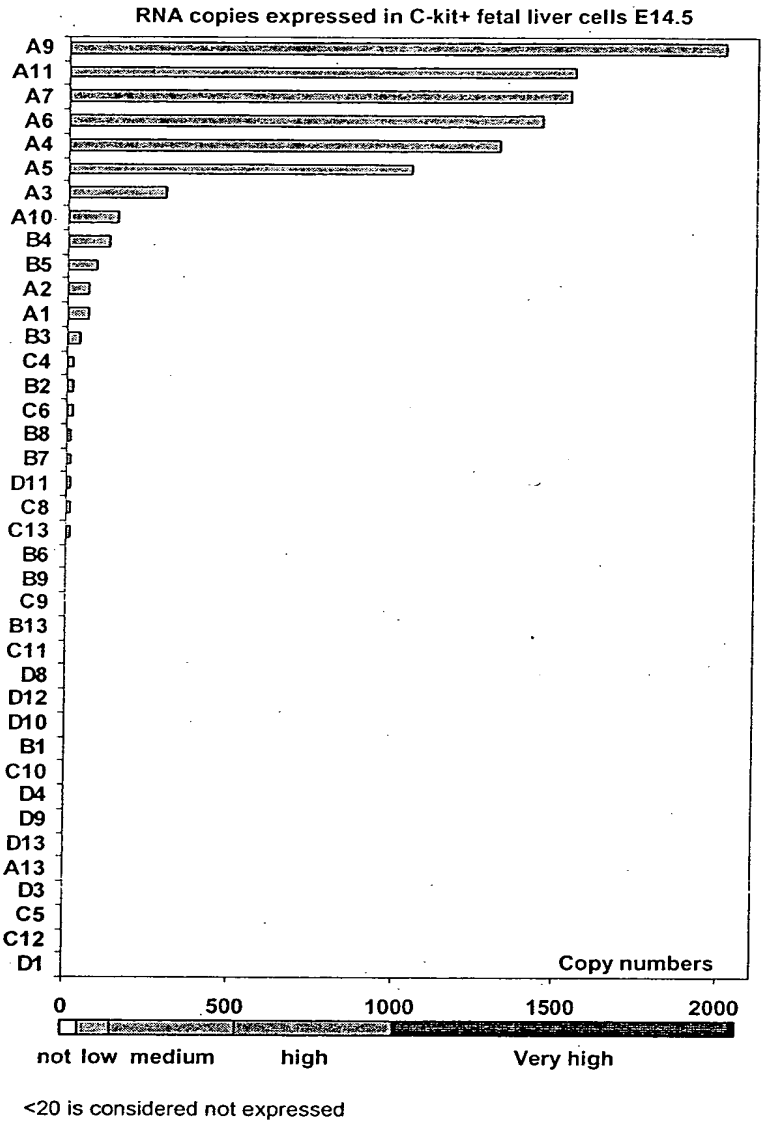


Fig. 10

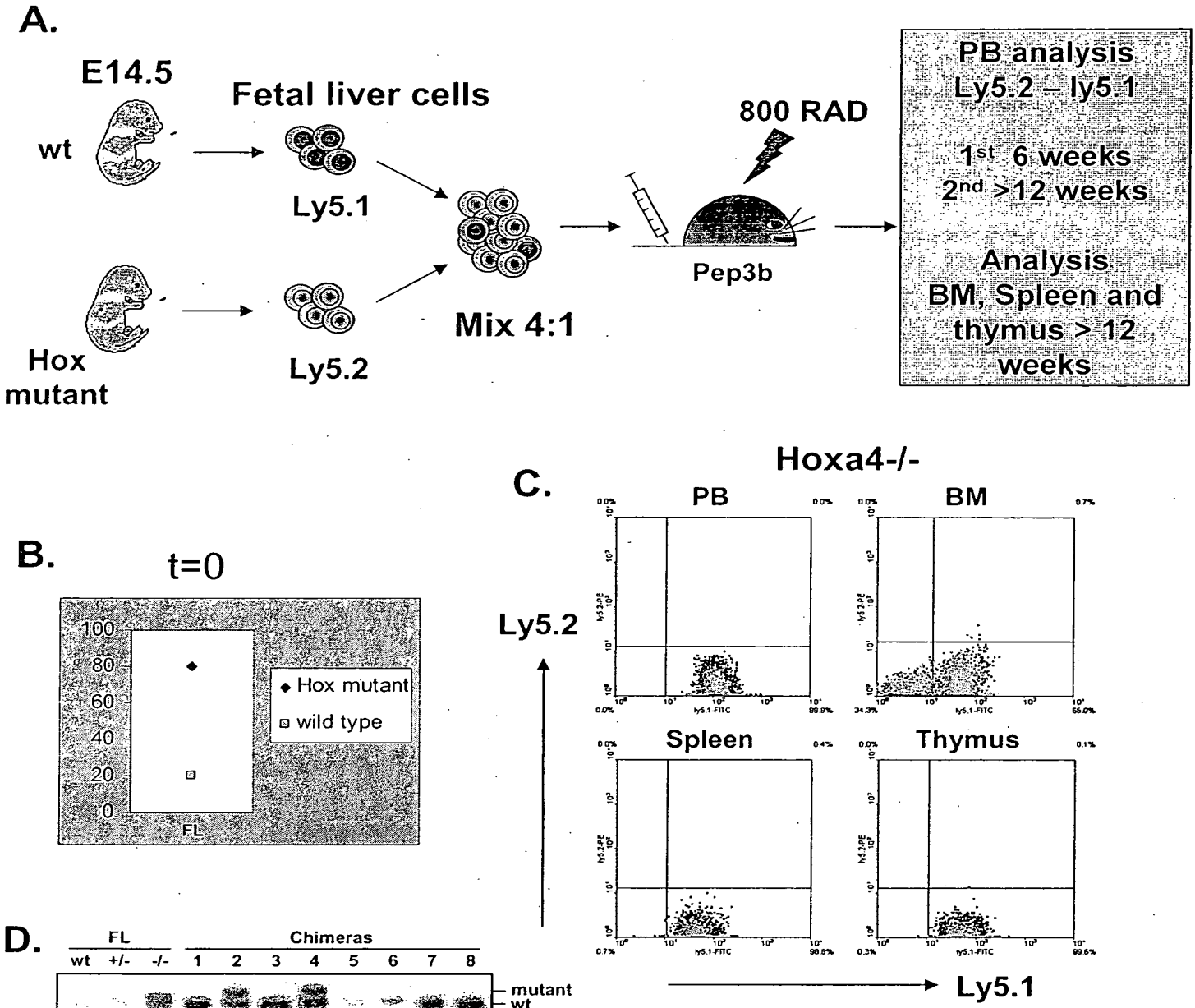
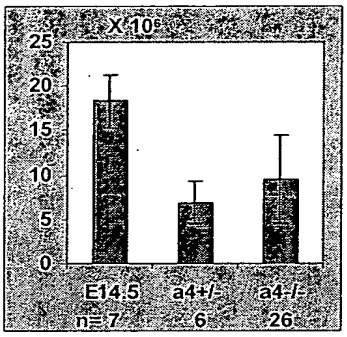
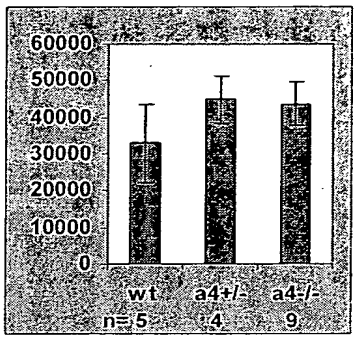


Fig. 11

A. Cells/fetal liver



B. CFC/fetal liver



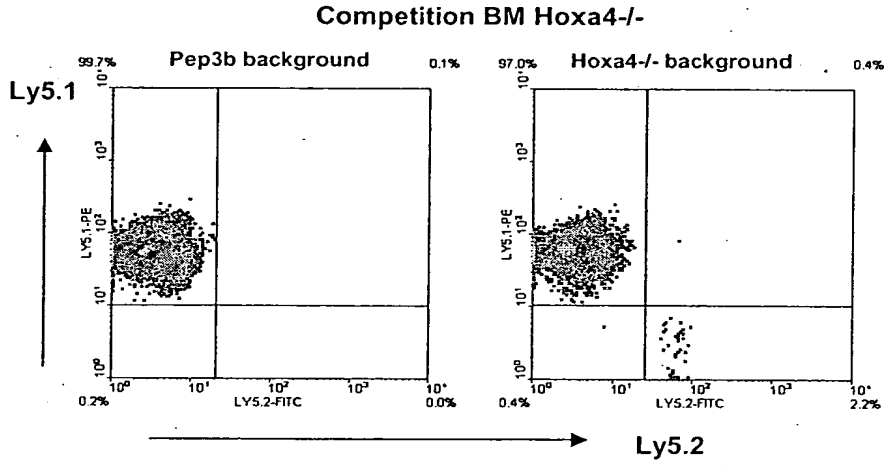
C. *Table 1 Hemapoietic progenitor numbers in E14.5 fetal livers of normal and mutant mice*

		% SKL	SKL/FL	CFC/1000 SKL	cells/colony
			x 10^3		x10^2
wt	n=8	0.4 ± 0.2	43 ± 15	49 ± 9 [a]	7 ± 6
Hoxa4+/-	n=8	0.7 ± 0.0	54 ± 11	72 [b]	11
Hoxa4-/-	n=8	0.6 ± 0.1	36 ± 12	113 ± 23 [c]	12 ± 3

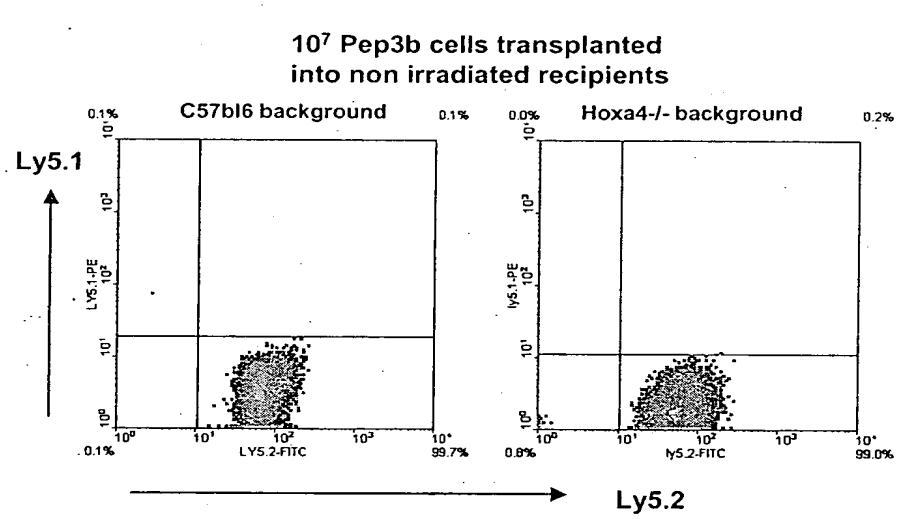
CFC: colony forming cell; SKL: Sca+, c-kit+, Lineage -; FL: fetal liver; : a: n=3; b: n=1; c: n=4

Fig. 12

A.



B.



C.

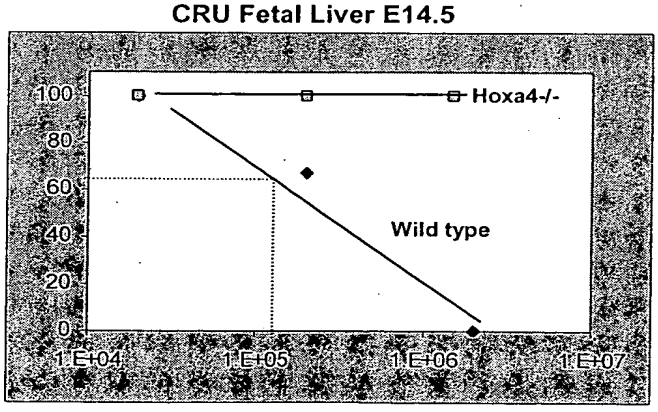


Fig. 13